

### Passion for Beauty: A Model for Learning

# Conrad Hughes International School of Geneva, Geneva, Switzerland Email: conrad.hughes@ecolint.ch

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This essay investigates the idea that effective teaching entails a passion for the beauty of the subject matter being taught. The first part gives a summative overview of the last 72 years of constructivism with references to educational research and discussion on content, cognition and attitudes. This overview is set against the problem of increasing pressure on students and teachers in an age where university places are difficult to secure and students are not always motivated. The second part of the essay investigates the issue of student motivation. Forced learning will be discussed, the problems of trying to cater for student motivation through pedagogy and curriculum, and finally the idea of the muse, arguing that the most effective learning must involve some degree of passion for the subject from the teacher that the student integrates and appropriates. The conclusion of the essay considers passion for beauty as the core element of good learning and how this should be valorized openly and not seen as opposing constructivist pedagogy.

Keywords: Constructivism; Understanding; Passion; Learning; Motivation

#### Introduction

This essay aims to do three things. First it will outline a significant part of the major thrust of educational practice and philosophy over the last 70-odd years to show how constructivist pedagogy has been influenced by cognitive neuroscience, pragmatism and ethics. This paradigm has left us with models that are based primarily on the importance of students' understanding of content and their ability to harness skills that put them at the centre of the learning experience. Second, the essay will identify a significant problem in secondary education where and when there is little student motivation to learn in the first place. External pressures such as university admissions policies tend to be rigid, not allowing for the type of theoretical practice that constructivism suggests and on the contrary can easily lead to negative reinforcement that does little to put the student at the centre of the learning process. Furthermore the essay will discuss some of the potential pitfalls of trying to create a student-friendly curriculum in this context and how this can leave us with a fairly superficial structure in which unavoidable content learning is subordinate to catchiness and inanity. The second half of the essay will argue its third point, that one of the most important elements of learning is motivation: because of this, teachers need to teach boldly and with sufficient passion and acuity to arouse students. Simple anecdotal examples will be used to suggest that the teacher has a role and responsibility in the process not only to facilitate and develop learning through techniques but as someone mesmerized by the beauty of subject matter to whom students look with inspiration and passion, wishing to emulate and even surpass. The conclusion of the essay is that the old model of the muse needs to be remembered and used if the starting point of learning is to be successful, for it is from this that all else ensues.

## Content, Cognition, Attitudes and the Missing Link

Education in the 20th and early 21st centuries is no easy dis-

cussion. Debates rage over the type of schooling that will prepare students for the future (Robinson, 2008: p. 6) in such a way that they will be equipped to function effectively in the professional world, exemplify attitudes and ethical positions that will help "make a better and more peaceful world" (IB, 2002), whilst carrying knowledge over to the next generation that will be relevant to a rapidly changing environment allowing for a transfer of skills across different disciplines (Dewey, 1938; Vygotsky, 1978; Perkins, 2010).

These issues are set against burning philosophical, historical and cultural questions of content: since stakeholders from diverse cultural traditions enter into a global market, clearly one single cultural framework is not enough to do justice to the complexity and multiplicity of these current and future relationships. Whose history should be taught, which language of instruction should be privileged, which canon should be passed down to students and why? The problem is particularly nuanced as debates over what exactly the canon of knowledge should look like are argued over within cultures themselves (Bloom, 1994; Nussbaum, 1997).

At the core of it all is an increasingly dramatic situation for students whereby tertiary educational provision, ostensibly more inclusive, is becoming increasingly expensive across Europe, whilst in the United States top university places are more difficult to secure, with students being turned down despite perfect SAT scores (Finder, 2008). Practice in many countries is judged to be archaic and ineffectual (Fleck, 2010) as students leave school and university with no real guarantee of employment. There is an overwhelming sense that the type of learning that is going on in most schools is out of synch with the modern world and ministries, organizations, educators and researchers are looking to new models (Robinson, 2008: p. 4), signalling ever new directions and soul-searching amidst the plethora of ideas and potential frameworks that are suggested. Questions arising from this crisis are not new (What is an education for? How do we make education better?) but the context is perhaps more diffuse, complex and entangled than ever be-

fore.

If we look at the advances in education over the last century we can establish three broad strands.

On the one hand there is the question of the significance of the type of knowledge learned at school. From John Dewey (1938) to David Perkins (2010), educational theory over the last 72 years has witnessed an increasing emphasis on worthwhile knowledge being concretely relevant. Dewey did not mix his words on the subject, claiming that "[t]here is no such thing as educational value in the abstract" (Dewey, 1938: p. 46). Perkins suggests that effective learning should contain "come-uppance" (Perkins, 2010) whereby content is aligned with the world in which we live. Through and beyond these pragmatist ideas, a good education is seen as a transactional dialogue and not a monologue, placing students in a meaningful relationship with content that through carefully designed curriculum and assessments will allow them to take an active part in and, ultimately, ownership of the learning process (Wiggins & McTighe, 2005). Furthermore, constructivist pedagogy sees the student, not content, as the central learning agent; knowledge is not something that exists externally and has to be appropriated by students; it is something that is created by the student who integrates and assimilates information, making it applicable through interaction and reflection (Dewey, 1938: pp. 40-42).

On the other hand, in the wake of Jean Piaget (1953), Jerome Bruner (1960), Burrhus Frederic Skinner (1968) and Lev Vygotsky (1978, 1997), psychology and cognitive neuroscience have affected pedagogical practice heavily. Researchers and theorists such as Edward de Bono (1985), K. Anders Ericsson (1993) and Howard Gardner (1983) have looked at increasing advances in brain research to tell us how effective learning can take place. Different levels of motor skill have been researched thoroughly and learning is seen increasingly as something that should exercise diverse parts of the brain, allowing students the chance to shine in various areas. This has been tremendously influential on teaching in recent years as part of a general sway to scientific discourse. Gardner's taxonomy of "multiple intelligences" (1983) has affected the way many teachers evaluate their students' abilities. Psychometric testing has moved considerably to non-verbal exercises to try and evaluate performance and capacity without linguistic and cultural matters influencing the results unfairly. Vygotsky insisted that higher mental functions could not be understood without breaking them down into lower mental functions. He therefore discriminated between "primitive [...] biological features in the mind" that respond to stimuli and analytical "higher forms" of "cultural development" (Vygotsky, 1997: p. 83). The idea is that if the learning process is to be understood and facilitated well, then we need to atomize higher forms into more measurable parts that all stem from basic chemico-physiological primitive fundaments. Hence the modern style of teaching involves breaking down learning into short activities that allow for stimulus response and lesson plans that look at grasping concepts separately. We could oppose this to the older method, consisting of months of monotonous lecturing focusing almost uniquely on content and expecting the lower mental functions to take care of themselves.

Finally there is the question of attitudes. The International Baccalaureate (IB) Learner Profile articulates ten qualities that are deemed important to nurture in students if the educational experience is to be more than simply psychometrical (IB, 2002); Howard Gardner, in his book *Five Minds for the Future* (2006)

explores—amongst other things—the importance of ethical responsibility; George Walker's writings have emphasized the types of attitudes learners should manifest (Walker, 2006) and schools such as the United World Colleges chain place value on service learning as an essential part of education for very good reasons (Peterson, 1987). Kurt Hahn's influence on this aspect of schooling has been significant and much of the philosophy behind the IB advocates a holistic education that develops a caring approach in students (IB, 2006).

The objective of this essay is not to give an extensive literature survey and repeat what has already been said but rather to say what is not there and why that which is not there is not only a significant omission but core to the crisis and confusion that is driving so many to look for yet more taxonomies, shift from one emphasis to the other, review curriculum in increasingly short spans of time and look at modern research so keenly, groping for the magical key that will unlock the nexus and leave us with an education that is not only effective on paper and in research journals, but one that keeps the students on the edge of their seats, crying out for more, wanting to learn and exemplifying the type of motivation that will make learning a success.

#### **Constraints and Negative Reinforcement**

Since all of this theory is not only about the learning process but more specifically about the learner, it might be worth considering what learning means and what it is like from the learner's perspective rather than through taxonomies, neuroscience or academic debates that take place in the stratosphere of curriculum design, ministerial policies and published research. More specifically, why do we learn what we do in the broadest sense? Since we have all learnt something at some point in our lives, anyone reading this can consider the question in an empirical anecdotal sense by simply reflecting on something that he or she knows well and then asking why it is that he or she knows this.

Consider, for instance, why a child learns language, why someone learns a trade or why we learn certain subjects. There are, it seems, only two reasons and they are by no means mutually compatible. The first is because we have to, the second that we want to. The next few pages will develop examples of forced learning, explaining why it is so problematic; then the essay will look briefly at issues of student centered curriculum as a potential remedy to this before we turn to the second reason of learning through desire.

On the subject of forced learning, many students are open and frank about the fact that they learn at school simply because they are told to by their parents, because they are threatened with the idea of not graduating from school and therefore not being equipped to survive in the world. This sense of forced pragmatic necessity can actually supersede education in a conservative, institutional sense, causing students to drop out of school and learn a trade to be more competent and competitive.

Efforts to make students interested in traditional academic subjects are far from simple. As Gardner points out, "become passionate' is easy to say, hard to do, impossible to compel" (Gardner, 2010). When teachers find a lack of motivation in the students it presents a challenge that can become extremely demoralizing, a dead end where the battle seems lost before it has been waged. Indeed, part of the crisis of modern education lies squarely in this issue: there is a feeling that students are not

motivated because what they are being asked to learn is not relevant or does not interest them (Robinson, 2008: p. 12). The problem is that content cannot simply be invented and must be met, and this leaves the teacher in the difficult position of being forced to make students interested in prescribed subject matter. A poignant if not disturbing illustration of this can be seen in Jean-Paul Lilienfeld's 2009 film "La Journée de la jupe" when a theatre teacher, Sonia Bergerac, teaching unmotivated students in an inner-city "banlieue" becomes so desperate that she eventually takes the class hostage with a pistol and forces them to read Molière.

So why are students not motivated to learn certain subjects? Again, the reader can ask this question of him/herself. Which subjects did you never find the motivation to learn and why?

One could argue that one of the chief reasons for a lack of motivation is to do with curriculum design where the sequencing of skills and content involves theory before application. To sit students down and give them years of music theory and then at the end of the gruelling lessons to place an instrument in their hands and expect them to play seems strange or at best archaic in terms of modern pedagogy. Many ancient art forms start with a rigorous, disciplined approach to theory and small, nongratifying exercises that are learnt without pleasure but with grim determination. This is the world of the conservatory and classical dance in which little care is given to reflection, relevance, stimulus response, multiple intelligences and trying to find the student's strengths, and we are firmly in the old world of teaching where a lack of interest in academic content is a given and is therefore instruction is done through corporal punishment, humiliation, pain and stamina-building marathons of endurance. This is a universe where the subject is at the centre and the student at the periphery.

Clearly this type of instruction cannot be considered seriously in modern schooling, particularly if low levels of motivation are there to start with. It would make learning not only ineffectual but profoundly unpleasant, possibly turning students away from knowledge and skills acquisition even more forcibly. At the same time, it seems disingenuous to pretend that students will become excited about content of their own accord.

Very often one of the key reasons that we do not learn content well is that it is not taught well or not taught at all. Many of us look back and think "I could have become interested in that subject if I had had a different teacher". Another, possibly more superficial reason is to do with the intrinsic nature of the subject, hence we find clichés along the lines of "I was never good at mathematics" or "I am not really a literary sort of person". These deterministic assumptions may or may not be true, a problem residing in the fact that often they were not studied in depth hence the quasi-tautology of disliking a subject that we know little about.

The problem in school education is that syllabi are presented to a group of students that is expected to learn them without necessarily wanting to do this. In the old paradigm the way around this problem was simply to force the students to learn the prescribed content because their needs and desires were not factors to be considered (Dewey, 1938: p. 44). If progressive educational methods are looking away from negative reinforcement and punitive methods, then huge skill is required to somehow make students want to learn that which they have not chosen and do not yet know. Gardner suggests that the teacher requires interpersonal intelligence in order to know the students well (Gardner, 2006: p. 50) but how feasible is this when con-

ditions are not optimal? The teacher is also faced with the daunting task of getting the students "hooked" on national or international history, pure and social sciences, mathematics, languages and the arts, and in some cases there are over thirty students in a class, so realistically the skill cannot always reside in close contact, but must also lie in the ability to captivate a wide audience and hence draw interest from the subject matter itself.

Often what happens is that when students do not respond the way teachers would like them to, with enthusiasm and an appetite to learn, the type of close relationship engendered between teacher and student entails the negative reinforcement tactics that should be avoided: students are warned that if they do not study they will fail, not be able to secure a place in the professional market, leave school without diplomas and skills. More primeval still, students are deprived of free time and made to work in detention, and in less felicitous cases they are scolded, suspended and ultimately expelled.

The pressures do not only come from poor conditions or unceremonious attitudes from teachers; university places are most often not offered to students according to their strengths and willingness but more frequently according to inflexible standards, tests, tariffs and entrance interviews. This is where considerable angst, fear, stress and unhappiness come into the picture: students have to perform well on SATs, they have to come out of their schooling with a certain grade average or points score, at least if they wish to integrate high-status institutions.

Despite efforts to the contrary, the structure of many university admissions mainly correspond to the old world, hardly a constructivist paradigm where learning is enhanced through the instructor finding the student's interests and nurturing them, for quite obviously the student's interests will not always fall neatly into the subjects that are taught at school. We could also discuss, as does Jane Johnston, the predilection education systems have for "sequential" and "precise" thinking (2009: p. 122) but this can still be considered as a subset of the dictates for achievement that come from universities as well as the kind of subjects taught at school that will be recognized (or not) by most European universities. These issues are delicate and one who owns up to them or endorses them might be branded a traditionalist (a type of dirty word in school education nowadays), wanting to bring back the stuffy lessons of the past with little pedagogy but more top-down vertical instruction with the teacher as the font of knowledge who lectures at students sitting in rows, possibly ordered in rank file, trying to force achievement that is associated with the immutable givens of post-secondary school reality. It might be easy to quote Jean-Jacques Rousseau who said that the setting should fit the child and not the child the setting (Johnston, 2009: p. 123), but this is certainly not the way mainstream tertiary educational provision functions in most parts of the world, nor does the job market offer opportunities for people to be themselves and to expect the infrastructure to accommodate them. Such a situation should not be celebrated, but we need to argue within realistic parameters if we are going to come up with a discussion that is helpful for the millions of students in the world trying to gain a place in the world's global market but also to surpass themselves and become excellent at something that is recognized and validated.

So if forcing students to learn becomes a less than satisfactory de facto principle that we want to but cannot necessarily avoid, then teachers at some stage will have to make content

interesting to students and will not be able to rely on pedagogical methods alone for this because students need to become interested in subject matter if they are to excel in these prerequisite domains both at school and further down the line.

### The Potential Pitfalls of Perceived Student-Centered Curriculum

If (and it is a big "if", especially in national curriculum where syllabi are often dictated by political and economic pressures) schools are given flexibility and are able to create their own booklists, topics and courses, as is the case in the IB's Middle Years Program (MYP), then there is another risk, that of trying to put together an offering that is within students' reach, reflecting their environment but ultimately because of this, no longer educating in the etymological sense of "rearing" them out of one state towards another, higher one.

One of the problems of supposedly modern student-friendly curricula, privileging ostensibly modern skills over content, throwing Latin and Greek literature out the window and instead teaching trendy works written in slang with references to You Tube is that we assume that what the student wants to learn or will find interesting and relevant is that which is already around them. Is this always the case? Can we be sure that a student will be more motivated to learn about global warming and how to set up websites than the rate at which metal expands when heated or how Aurelian defeated Zenobia? Dewey does not consider all types of experience as valuable in a pedagogical sense and even goes so far as to brand some as "mis-educative" (Dewey, 1938: p. 13), going on to warn of those pleasures that draw us in but create a "slack and careless attitude" (14). There is a danger that allowing students to dwell so much in the centre of the learning process where all is pleasurable, a reflection of the digital age and current affairs that students are asked to try and learn what they already know.

Micah, a student interviewed in Kathleen Kushman's *Fire in the Mind* tells us that "if you are getting the answer without really realizing why it's important, it's empty. You are not really learning. You are going to drop that later because it has no importance in your life" (Kushner, 2010: p. 11). This essay's only reservation is at the basic level of how teenagers (or anyone) can know exactly which piece of knowledge is important in their lives with such conviction. Can all learning be pegged on what is deemed important by the learner? Furthermore, not knowing what lies in the future, can we be sure that what we think is important or unimportant now will still be so later? It is difficult to know which language, skill or piece of information will be useful at some unforeseen corner.

Trying to prepare someone for an unknown entity is not only somewhat fallacious but could create practice as ineffective as that which looks back at knowledge acquisition without notions of immediate relevance. After all, the more you learn the greater the repository of information at your disposal for some potential application, so surely it would be better to learn as much as possible (even including what Deweyists would shun as abstract and meaningless) rather than attempting to cut out ideas that are deemed no longer relevant (to whom?). Ken Robinson says that we need an education that "connects people with their true talents" (Robinson, 2008: p. 8), but surely talent comes with and through education and not before it: how can an educational provision meet talents before we know what the talents are? And if we are going to establish these talents be-

forehand though testing, then we come back to the problem of these tests favouring one type of intelligence over another. At the centre of it all there could be confusion but more critically a distinct void, surrounded by eddies of jargon and recent untested theory. Despite attempts to make it all fun and colourful, the situation could leave both the teacher and the student with a suspicious feeling that the erudition and beauty of learning has been lost somewhere along the way, that trying to reform education too quickly instead of building on what has gone before will leave us rudderless.

The real question is whether it is by creating new methods and breaking thinking processes down that teachers will get any closer to the mysterious core of motivation that is so vital for any type of learning to flourish and survive. Where there is motivation even the worst types of pedagogy can be survived. Albert Einstein said "it is, in fact, nothing short of a miracle that the modern methods of instruction have not entirely strangled the holy curiosity of inquiry" (1949) and what he was referring to as "modern" would nowadays no doubt be seen as archaic.

Are the questions of content and relevance at the centre of this or is there something else that makes up the core of powerful learning?

#### The Desire to Learn

So far this essay has discussed learning in terms of negative reinforcement and some of the problems that could get in the way of progressive methods, but we need to come back to the question of why we learn. If the first reason listed is that we learn because we have to, then the second reason, closer to the heart of constructivist pedagogy and far more progressive, is that we learn because we want to. Contextual pressures place us in an environment that presents us with multiple choices and we choose certain above others: we might want to learn to play the flute but not the piano, we might want to learn physics rather than biology and we might want to learn about the history of Guatemala rather than that of China. Whether that choice is a genuine existential one or a pseudo-desire that is anchored in less clear adjunct factors will not be argued here. On the contrary, the point this essay hopes to make clear is that learning from choice is something at every human being's disposal, irrespective of cognitive or genetic predispositions (which is, nonetheless, not to say that the choice factor will always be used or tolerated) and it therefore appears an extremely valuable point to discuss. It is difficult to imagine a person in any set of circumstances who literally wants to learn nothing or has learned nothing at all from choice. It is a universal idea, very simple, a truism perhaps, but an undeniable one.

It is at this second reason for learning that this essay will be looking from now on in more detail, for pedagogy and theory, as well as common sense and personal experience, show us that the best type of long term learning and the most enjoyable learning comes out of desire. The idea of child-centered learning is directly situated in this idea: student will and motivation must be encouraged, developed, enhanced, rewarded and strengthened. Hence, if we look at fairly modern educational programmes like the MYP we see the culmination of the five years' learning comes through the form of a Personal Project where inquiry based learning finds its starting point in the student's interest and not in any external agency that is imposed on the student (IB, 2009). The IB extended essay asks students

between 16 and 19 to choose an area for specialization in which they will conduct research (IB, 2007), students choose activities for their co-curricular study (IB, 2008) and of course at post-graduate university levels students are to find a research topic that interests them and pursue this in the form of a dissertation or extended piece of research.

It will be noted that whilst there is a degree of student choice in these offerings, they are still rooted in established subjects that are not decided by students but syllabi that have been chosen for the students: one cannot pretend that secondary and tertiary education allows the students absolute choice, so the problem of making students interested in something prescribed remains firmly at the centre of the dilemma.

#### The Muse, Mimesis and Passion for Beauty

In *Fires in the Mind*, Kushman considers the question through extensively documented interviews with children. The book shows that children were often good at something outside of school for a variety of reasons but ultimately the core one was that they wanted to know something and were therefore driven by that initial impetus. That personal experience is at the centre of learning is clear and has formed the basis of progressive educational theory (Dewey, 1938: p. 9). That human beings learn well when they are interested in what is to be learnt need not be researched and documented. Even though this has been done felicitously by Kushman, it seems quite obvious. By looking at oneself one can see how evident this is. Think of a skill you have mastered and try to dissociate it from your desire to learn the skill. Is this even possible?

Students are drawn to a subject or skill because they are inspired by some masterful expression that they witness and wish to integrate. If it is not the inherent subject matter that is appealing or even the skills involved, then we can consider the passion the mentor has for these that becomes the driving force. Surely if we look back to some of the best teachers we had, we are reminded of strong personalities with an infectious passion that we wished to appropriate so as to somehow be like the teacher, the way the apprentice wishes to match up to and even surpass the master, not necessarily in terms of knowledge and skill but in terms of drive. Gardner himself tells us that it was Erik Erikson who "probably sealed [his] ambition to be a scholar" and that Jerome Bruner was "the perfect career model" (Gardner, 2006: p. 8). To give an example, I play the guitar. Why I learned that instrument is, I think, because when I was about five my mother took me to a concert in the suburbs of 1970s Johannesburg and I stood timidly at the back of a dingy bar while the passionate and entranced South African musician Johnny Clegg picked intricate African melodies on his guitar while the sound of the bass and drums reverberated in my small frame and sent shockwaves to my core. "I want to be able to do that" I said to myself. Not long after my father bought me a classical guitar and I was attending lessons.

My first teacher was a prim and proper gentleman surrounded by tuning forks, pristine nylon-string guitars arranged neatly in rows and he played with a straight back using a small stool upon which he artfully propped up his left leg. There was a painting of Segovia looking down at us severely from the beige wall of his lesson room. He would make sure I was sitting in the right position and made me learn to read crotchets strewn across a treble clef: hour after hour I would pick at one string after the other, issuing simple wooden melodies that did little to inspire

me. I was learning the classical method and as I did this—or tried to do it—the African melodies I had heard in the dimly lit bar faded from me and the whole enterprise became a rigid, frustrating affair. I asked my teacher where it was all going and he gave me dispassionate logical constructivist explanations, explaining why if I did not hold the guitar in the correct way I would not be able to get the right sound out of the instrument, would struggle to grip the frets properly and would wind up hurting my back. The explanations, although helping me to understand, did not move me to try harder though, I did not do my homework well and was ill prepared for the lessons. The venture became a distinctly negative one, a combat to keep me interested and within a few months I asked if I could stop.

My father was keen for me to continue so we tried a different teacher. Unlike the former, my new teacher played in a band, he had long hair and wore jeans, his fingers were long and stained with nicotine and the room from where he taught was a type of shrine to rock stars, with large posters of wild looking men wearing earrings playing electric guitar solos on stage. The guitar was not his trade, it was his life. In one corner was the famous photograph of Jimi Hendrix burning his guitar at the festival of Monterey, beckoning the flames like a possessed jinnee. My new teacher played the guitar the wrong way, with an arched back and his thumb dangling from the neck of the instrument insolently but I loved to hear him play for as he did he would close his eyes and enter into a mysterious second state of passion and love. I would ask him at the end of every lesson to play something for me. He did not seem interested in breaking down the learning process into smaller units but wanted me to wade into the deep end, to embrace it as a whole. His first question to me was "what is your favorite song?" I told him and he taught it to me, not bothering with posture, using tablature instead of a proper musical score and letting me go about it more or less how I wanted. I spent nights staying up late learning the chords, steadily feeling myself devoured by the flames that had licked me when I had seen the concert. He had understood that I would only learn if I was interested: it was the passion that he kindled, not the understanding.

The point is that, far from constructivist theory, method had little to do with it. I was highly motivated by the mimetic urge to become someone else, someone wholly absorbed by a passion. Because of this, the learning was fairly painless. This is not to say that it was the best way in terms of technique for my idiosyncrasies became, from a purist perspective, fossilized errors. Much later I studied harmony more formally and was able to put that knowledge into practice, as I played with others I would be reminded that my posture was bad, why I had to keep my thumb firmly at the centre of the back of the guitar neck and so on. Eventually, when trying to move my fingers quickly between more sophisticated bridged chords, I understood and assimilated the fact that I would have to change my method somewhat. The skills and even the content came after the pleasure principle though, after the desire to become engrossed. I was willing to put myself through the rigour because the emotional hook had been taken many years earlier and I had integrated an endless desire to do better. At no point did any "capacity to form an accurate, veridical model of [my]self" (Gardner, 2006: p. 50) seem even remotely relevant for I was absorbed and had lost my own sense of self, ability or understanding and was mesmerized by the beauty of the music and the burning will to be able to play with the same oneiric energy of the muses that haunted me. Nor did questions of any kind of

relevance seem important. The former teacher looked at the guitar in a cerebral, cognitive, methodological manner and for me that was not enough to keep me going: there was something fundamental missing, the soul and colour that came with the second.

In this modest example we are tapping into ancient frameworks of motivation where the first step is a mystic initiation that has been brought on by a sublime presence the way that Gibbon was inspired to write his monumental *The Decline and Fall of the Roman Empire* sitting "amidst the ruins of the Capitol, while the bare-footed friars were singing vespers in the temple of Jupiter" (Gibbon, 1970: p. 7) or how the mysterious girl that Joseph Conrad saw whilst sitting at the Place de La Comédie in Montpellier drove him on to write one of his finest novels, *Lord Jim.* It is the central idea behind John Keats' *Ode on a Grecian Urn*, the idea of inspiration coming from a muse.

The question is not only one of passion but also beauty. We should not forget that students still look up to erudition, to academic knowledge that they can emulate rather than looking to themselves as the foundation of knowledge or their peers who will work out problems in a group as the teacher moves about them facilitating, suppressing his/her presence and downplaying his/her convictions, knowledge and passion. This is because mastery is beautiful and beauty lies beyond cold reason. There is something archetypal that draws us not to that which we can do, but that which is just out of reach, that which transcends us, the way a powerful piece of art moves someone without the person necessarily understanding, or the way a brilliant mind discussing mind-boggling astrophysics is always just out of reach but tantalizingly close. To a certain extent this goes beyond Gardner's central premise, that "education's central mission should be understanding" (Palmer, 2001: p. 11).

Unlike understanding, which is linked to cognition, beauty and passion are more linked to desire. The students' desire can be kindled by the teacher's desire. At the school where I work we set up a series of lectures on the history of thought: the project was very simply for a small group of teachers to lecture to the best of their abilities to a large group of students on the major ideas that have shaped history from the pre-Socratics, Socrates and Plato through Aristotle, the Roman philosophers, Averroes, Avicenna, St Augustine and St Aquinas, Renaissance, Enlightenment, 19th, 20th century thinkers right up to postcolonialism, feminism and post-modernism. We once told ourselves jokingly that we were doing the lectures for us and not for the students and even though those anti-constructivist tonguein-cheek comments were made fatuously, as the course unfolded the lectures became more and more unflinchingly high-powered and the lecturers would dig deeper into highly complex ideas like Leibniz's Monadology, Einstein's theory of relativity, Foucault's theory on power, Lacan's post-Freudian psychoanalytical theory and Baudrillard's thesis on simulacra.

The danger, of course, was that we would leave the students behind and some observers commented that the course seemed pretentious, too difficult and that the students would not understand. Worse still, how clear were the teachers that they understood what was being lectured? However, as the lecturers became increasingly passionate about their lectures, the students seemed to rise to the challenge even more. At the end of the last lecture a group of students approached us and told us that this was the best part of their entire schooling and the reason for this was simply because of the passion of the lecturers but also the tantalizing feeling of moving towards something elusive but

beautiful. We were giving everything we knew and had to the students, pushing ourselves to learn and know more as we went along, strong in our conviction that we were passing on our passion for the beauty of ideas, and this seemed good. We might turn to Socrates' words in Plato's *Phaedrus*: "men lead hungry animals by waving a branch or some vegetable before their noses, and it looks as if you will lead me all over Attica and anywhere else you please in the same way by waving the leaves of a speech in front of me" (Plato, 1973: p. 26). As we are mentioning The *Phaedrus*, then we will remind ourselves that Socrates' position on true knowledge, unlike Plato's, was that it could only be accessed deeply through love and passion.

#### **Beauty and Transcendence**

Looking to modern research as the answer to the significant problems of education has allowed schooling to be far more pleasant and student-centered than it was about 100 years ago. However, we should remember that it is not a crime to look far back either, and to consider not only what has been said in the past 70-odd years, but was has been said over the past 5000 years, for in that significant repository of thought and experience there might be solutions that we forget if we lurch ahead too eagerly. Gardner's most recent book, Truth, Beauty, and Goodness Reframed (2012) working off Plato's famous triad, looks for three things in knowledge: the good, the true and the beautiful. Much work has been done on conveying the truth (rules in science and axioms in mathematics, integrated and nuanced views of history and pedagogy that has been researched), there is an increasingly strong movement towards the good, trying to educate ethics and morality in lessons so as not to leave students with knowledge but no sense of human responsibility and values, but what of the beautiful?

If the muse is first and foremost beautiful and if beauty comes close to a spiritual experience in the transcendental model it presents us with, then how do we consider aesthetics in secondary schooling? How do we study fractals, Euclidian geometry, Impressionist painting and Mahler's Resurrection symphony? Too often it is through a type of materialist, skillsbased scientific objectivity that asks students to evaluate, to judge, understand and decorticate. When students are placed before a painting, they are quickly expected to analyze the use of media, the historical content, the meaning (is there always meaning?) rather than appreciate the sheer ineffable power of it. This unhappy manner of stripping everything down to a comprehensible form can often take away that which is sacred in knowledge: its ongoing search for metaphysical truth.

We can trace this approach back to figures like Plato with his almost absurd reliance on reason over passion (passion for Plato seen as something unreliable and dangerous), the British Empiricists like David Hume who would explain that everything in human consciousness is simply a mirror of what we have already perceived, "impressions" that are augmented by an excited mind, thinkers such as Darwin, Freud and Marx who did away with transcendence and tried to explain the human condition through materialist, biological and empirical methods, existentialist philosophers who insisted that humans have not sublime essence but merely exist like one of Giacometti's stick men trudging though a dark and meaningless whirlwind. The post-World War 2 turning-away from sublimation is understandable since the figure of Adolf Hitler gave us an example of the danger of unbridled passion inspired by gargantuan ideas

that were in reality terrifying expressions of hatred. However, we should not allow raw passion to die in education because of this since the emphasis on ethics and responsibility, service and reflection that courses such as the IB give us consider this carefully and move (or at least aim to move) the student away from destructive passion towards the realms of knowledge and virtue rather than hatred.

#### Conclusion

If there is to be passionate and lifelong learning, then there must be something to stimulate the student, a powerful catalyst. Few, if any, of the theories outlined in the first part of this essay take this into account, instead it's all about abstractions, skills, content and values. What this essay is proposing is that good teaching and good learning goes well beyond this into something straightforward: passion for the beauty of knowledge.

This essay may not be concluded without celebrating the efforts of countless teachers worldwide. Many of them work in more than deplorable conditions and with no other pedagogical tool than their own passion and thirst for transmission of knowledge. Bewildering their students with the love they have for their subjects instead of trying to protect them from the rigour that comes intellectual growth, gifted teachers make a difference to their students every day and manage to give education the spiritual dimension of a quest. The master and apprentice collaboration depicted in this essay does not push for teachers to be the sole actors in their classroom. We can see educators not only as classroom facilitators but as igniters of boldness and ambition in their own subject. Good teachers may or may not be au fait with the latest research on education, they may or may not make use of the latest technologies but they all feel the need to make students transcend themselves and in the process they find their way to lifelong learning. As we push for teaching conditions and pedagogy to evolve positively around the globe, some core values must remain inalienable, amongst which the necessity to empower teachers by allowing them to express their infectious thirst for knowledge.

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